

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/001674

A. CLASSIFICATION OF SUBJECT MATTER

C12Q-1/68, C12Q-001/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: C12, C07, A61

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)

CPD, Delphion, Pubmed & keywords: ("IGF-1R" or "insulin like growth factor" or "insulin like growth factor 1 receptor gene" or "daf-2" or "somatomedin receptor") and ("reproductive performance" or "longevity" or "reproductive stress") and ("polymorphism" or "marker" or "haplotype" or "genotype" or "linkage" or "mutation") and ("animal" or "livestock" or "mammal" or "mouse" or "murine" or "pig" or "porcine" or "cow" or "bovine").

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|---|
| X | HOLZENBERGER et al. IGF-1 receptor regulates lifespan and resistance to oxidative stress in mice. Nature. 9 January 2003, Vol. 421, No. 6919, pages 182 - 187. Refer to the abstract; figures 1-4 and legends; and the methods (p185, right column, last paragraph to p186, left column, third paragraph). | 1, 3, 4, 7-10, 25, 26, 44, 45, 51, 65, 70 |
| Y | HARUMI et al. Cloning of porcine IGF1 receptor cDNA and detection of sequence polymorphisms using RT-PCR. Animal Genetics. December 2001, Vol. 32, No. 6, Pages 386 - 389. Refer to the abstract; p386, right column, lines 8-12; figure 2; p387, right column, lines 17-19; and p388, left column, line 3 to right column line 1. | 2, 5, 6, 14-24, 27-37, 80 |
| X | | 71, 75 |
| Y | | 65, 70 |

Further documents are listed in the continuation of Box C.

Patent family members are listed in annex.

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|---|--|
| * Special categories of cited documents : | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier application or patent but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search
10 December 2004 (10-12-2004)Date of mailing of the international search report
27 January 2005 (27-01-2005)Name and mailing address of the ISA/CA
Commissioner of Patents
Canadian Patent Office - PCT
Ottawa/Gatineau K1A 0C9
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | NAVARRO et al. Cloning of cDNA for mouse insulin-like growth factor I receptor. NCBI Entrez, GenBank Report, Accession No. AF056187, 7 April 1998. Complete cDNA sequence. | 65, 70 |
| Y | VANRADEN et al. Genetic evaluation of length of productive life including predicted longevity of live cows. J. Dairy Sci. 1993, Vol. 76, pages 2758 - 2764. Refer to the abstract. | 80 |
| A | TISSENBAUM et al. An insulin-like signaling pathway affects both longevity and reproduction in <i>Caenorhabditis elegans</i> . Genetics. February 1998, Vol. 148, pages 703 - 717. Refer to the whole document. | 1-80 |
| A | HEKIMI et al. Molecular genetics of life span in <i>C. elegans</i> : how much does it teach us? TIG. January 1998, Vol. 14, No. 1, pages 14 - 20. Refer to the whole document. | 1-80 |
| A | HSIN et al. (27 May 1999). Signals from reproductive system regulate the life span of <i>C. elegans</i> . Nature. Vol. 399, pages 362 -366. Refer to the whole document. | 1-80 |